Additional information regarding the potential registration of Kaput Feral Hog Bait for use in the State of Arkansas

Feral hogs are a growing problem in the state of Arkansas. They have few, if any, natural predators and have reached an estimated population of four to five million across approximately 39 states in the United States. Their damage and control are conservatively estimated to result in agricultural and ecological costs of \$1.5 billion annually. These include:

- Damage to and loss of crops of at least \$800 million,
- Injury and transmission of disease to livestock,
- Ecological destruction,
- Property damage,
- Threats to native ground nesting birds and other small wildlife (including endangered species),
 and
- Contamination of human food and water supplies

Scimetrics Ltd. Corp, has submitted an application to register their product, Kaput Feral Hog Bait, in Arkansas. The application for registration is for the calendar year, ending December 31, 2017.

The EPA registered Scimetrics' Kaput Feral Hog Bait on January 3, 2017 (EPA Registration Number 72500-26). The bait formulation is warfarin-based and has demonstrated efficacy against feral hogs at a formulation strength one-fifth the concentration of warfarin that has been registered for controlling rodents in the United States for more than 60 years.

Kaput Feral Hog Bait is the only EPA approved pesticide for feral hogs. Currently, this product has not received registration and use approval in any other state in the country.

Once a company is granted an EPA registration, the company must also receive registration from the state in which the company wishes to sell and distribute the product. States can impose additional use restrictions on a pesticide product beyond the federal restrictions; however, the state cannot be less restrictive or impose restrictions contrary to those imposed by the federal registration.

Questions have been raised regarding the registration and use of this product that indicate the need for additional research:

- The potential for direct exposure of wildlife species to the product resulting in mortality
- The complicated nature of the label instructions which could make the inappropriate use of the product by some individuals inevitable and thereby increasing the potential for wildlife exposure
- A lack of research regarding sub-lethal dosage effects including the possibility of reproductive failure or embryo deformity to non-target species including humans.
- The potential for indirect exposure of wildlife and domestic animals to warfarin through the scavenging of carcasses containing the toxin.
- The toxin's persistence in water given feral hog's proclivity to water and that unclaimed poisoned carcasses will likely enter watershed systems.
- Potential human exposure due to feral swine being used a food source for many residents of the state

The product label, which includes the federal use restrictions, is included on the Arkansas Feral Hog Eradication Task Force webpage.

Opposition to the Registration and Use of Kaput Feral Hog Bait

Texas

Texas pushed to use warfarin to kill feral hogs earlier in 2017. Within a week of the product being registered, the Wild Boar Meat Company, the Texas Hog Hunters Association and the Environmental Defense Fund successfully sued to block the rule change. In addition to the law suit, the Texas legislature considered a bill (House Bill 3451) requiring that before approving a feral hog poison for use the state would have to conduct a study on its potential negative impact on other wildlife. A coalition of hunters, animal rights advocates, conservationists and meat processors mobilized against the use of the poison. The Texas State Rifle Association, Wildlife Rescue and Rehabilitation, the Texas Hog Hunters Association and the Texas Veterinary Medical Association are all among the groups that support the bill. The bill was passed on April 18, 2017 by a vote of 127-12.

Citing the threat of lawsuits, on April 25, 2017, Scimetrics announced that it had withdrawn its request for registration in Texas.

Louisiana

The Louisiana Department of Agriculture and Forestry (LDAF) registered Kaput Feral Hog Bait in February 2017 with the following restrictions: the classification of the product as a state restricted use pesticide (RUP) and the requirements for a pesticide stewardship training for the person(s) selling, purchasing and applying the product. The state RUP classification and the pesticide stewardship training requirements were implemented through a Section 24(c) registration.

On April 18, 2017 the Louisiana Agriculture Commissioner cancelled the state registration of Kaput due to a major concern regarding the registration of the Kaput Feral Hog Bait pertaining to the recommended "feeders" for use which may pose potential threats with the Louisiana black bear. Recently, the Louisiana black bear was delisted from the Federal List of Endangered and Threatened Wildlife.

Georgia

On April 21, 2017, the Georgia Department of Agriculture denied the registration of Kaput Feral Hog Bait with the conclusion that, even when the applicator follows all label directions, secondary exposure to non-target species is likely to occur. Additionally, the safeguards to protect contaminated meat from entering the human food chain are not sufficient.

The Georgia Department of Agriculture stated that it would re-consider the decision for the 2018 registration period under the condition that Scimetrics is able to provide sufficient use data showing the product can be used safely and effectively with little or no harm to non-target species.

Australia

Australia's experience with warfarin as a feral hog toxicant ended with them concluding that this wasn't a satisfactory method of control. Ultimately, Australia concluded that the method of death was so cruel that use of warfarin should be outlawed. Warfarin is an anti-coagulant, so hogs die by bleeding to death – including bleeding out of the eyes, nose, mouth, and other body orifices. The death is painful and gruesome. And they found that the timeline for feral hog death was 4-17 days while the product label says 4-7 days.

Organizations and Associations

Organizations that have asked the EPA to suspend or cancel the federal registration of Kaput Feral Hog Bait until such time that formal consultation can be completed with the United States Fish and Wildlife Service (USFWS), the United States Department of Agriculture (USDA), and the Food and Drug Administration (FDA):

- National Environmental Coalition on Invasive Species
- Center for Invasive Species Prevention
- National Wildlife Federation
- The Wildlife Society
- American Bird Conservancy
- Association of Fish and Wildlife Agencies
- Southeastern Association of Fish and Wildlife Agencies
- * The EPA denied this request on August 17, 2017.

Arguments for the Registration and Use of Kaput Feral Hog Bait

In denying the request to suspend or cancel the federal registration the EPA stated the following, "the Federal Insecticide, Fungicide, and Rodenticide Act, which governs the registration, distribution, sale and use of pesticides in the United States, is a risk-benefit statute. The agency has concluded that the benefit of feral hog bait as a tool for controlling the spread of feral hog populations far outweighs the risk".

"Non-pesticidal options for managing feral hog populations are largely limited to trapping and shooting. Registration of a toxicant to control feral hogs adds another option for controlling this economically and environmentally significant pest."

"The risks to human health and the environment are limited. Potential human exposure is limited because a dye is present in the bait that stains the hog's fat a vivid blue in as little as 24 hours. This dye identifies the hog as tainted to those who otherwise might eat it. In addition, since the concentration of warfarin in the bait is low, the fat is dyed blue before a toxic level of warfarin is reached in the hog."

"The agency also anticipates low potential for exposure and risks to plants and animals. Exposure to predatory and scavenging birds and mammals cannot be entirely precluded due to the possibility of feeding on carcasses. However, the agency's risk assessments indicated that the risk to these organisms was below the level of concern for carnivore/scavenger birds and slightly exceeded for mammals."

These restrictions include:

- The treated area must be posted with signs warning that a warfarin bait is being used to control
 hogs in the area, not to eat meat from animals shot or found dead in the area (including those
 with internal parts dyed blue) and prohibiting livestock grazing during the baiting period and for
 at least 90 days after toxic baits are removed from bait dispensers.
- Young children, pets, domesticated animals and persons not associated with the application are to be excluded from treatment areas.

- The bait must be applied in hog feeders equipped with weighted lids to discourage access by non-target species in the unlikely event that non-target species would come to the station after the two-week pre-baiting observation interval.
- The hogs must be pre-baited to the feeders/bait dispensers and observed so that the hogs are used to the feeders/bait dispensers prior to introduction of the toxic bait.
- Use of the bait is prohibited in the presence of non-target wildlife that could access the bait.
- The application site must be surveyed regularly. Any animal carcasses found must be collected and buried. If any bait is found on the ground it must be removed and properly discarded.

Process to be used in considering the application to register Kaput Feral Hog Bait for Use in the State of Arkansas:

- (1) Survey soliciting feedback from the public open between Friday, September 29 and Friday, October 20.
- (2) Survey results compiled and presented to Feral Hog Eradication Task Force at their scheduled meeting on Wednesday, October 25.
- (3) At the October 25th scheduled meeting, the Feral Hog Eradication Task Force will consider submitting a recommendation to the State Plant Board regarding registration and potential use restrictions for Kaput Feral Hog Bait.
- (4) The recommendations of the Feral Hog Eradication Task Force will be forwarded to the Plant Board for consideration. The Plant Board's Pesticide Committee will schedule a committee meeting between the dates of October 25 and December 12 for the purpose of considering the recommendations of the Feral Hog Eradication Task Force.
- (5) The Plant Board's Pesticide Committee will review the recommendations of the Feral Hog Eradication Task Force and consider submitting a recommendation to the full Plant Board regarding registration and potential use restrictions for Kaput Feral Hog Bait at their scheduled meeting.
- (6) The recommendations of the Plant Board's Pesticide Committee and the Feral Hog Eradication Task Force will be considered by the full Plant Board at their regularly scheduled quarterly meeting on December 12, 2017.
- (7) Any proposed rule approved by the Plant Board will undergo a public comment and public hearing period.
- (8) Following the public comment and public hearing period, the proposed rule will be reviewed by the Governor.
- (9) After the Governor's review the proposed rule will be submitted to the Executive Subcommittee of the Arkansas Legislative Council for final approval.